

Title (en)

Ultrasonic flaw detector and ultrasonic flaw detection method comprising three-dimensional imaging

Title (de)

Ultraschallprüfgerät und Ultraschallprüfverfahren mit dreidimensionaler Bildgebung

Title (fr)

Détecteur ultrasonore et procédé ultrasonore avec imagerie à trois dimensions

Publication

**EP 2182350 A2 20100505 (EN)**

Application

**EP 09013582 A 20091028**

Priority

JP 2008278045 A 20081029

Abstract (en)

An ultrasonic probe issues an ultrasonic wave to an object, receives a reflected wave from an object, and is provided with multiple piezoelectric elements. A three-dimensional display section displays three-dimensional flaw detection data superimposed on three-dimensional shape data of an object. The computer acquires a reflected ultrasonic wave signal from a reference object (reference). Based on the acquired signal, the computer corrects a reflected ultrasonic wave signal acquired from another object having the same material and shape as the reference. The computer allows the three-dimensional display section to display three-dimensional flaw detection data generated from a reflected ultrasonic wave signal resulting from a difference between a reference and an object.

IPC 8 full level

**G01N 29/04** (2006.01); **G16Z 99/00** (2019.01); **G01N 29/06** (2006.01); **G01N 29/44** (2006.01)

CPC (source: EP US)

**G01N 29/043** (2013.01 - EP US); **G01N 29/0609** (2013.01 - EP US); **G01N 29/0654** (2013.01 - EP US); **G01N 29/4436** (2013.01 - EP US); **G01N 29/4463** (2013.01 - EP US); **G01S 7/52077** (2013.01 - EP US); **G16Z 99/00** (2019.01 - EP US); **G01N 2291/044** (2013.01 - EP US); **G01N 2291/106** (2013.01 - EP US); **G01S 7/52068** (2013.01 - EP US); **G01S 15/8915** (2013.01 - EP US); **G01S 15/8993** (2013.01 - EP US)

Citation (applicant)

- NORIMASA KONDOU; YOSHIMASA OOHASHI; AKIO JITSUMORI: "Digital Signal Processing Series", vol. 12, 1993, SHOKODO CO., LTD., article "Digital signal processing in measurement and sensors", pages: 143 - 186
- POTTS, A. ET AL.: "Presentation and analysis enhancements of the NDT Workbench a software package for ultrasonic NDT data", REVIEW OF PROGRESS IN QUANTITATIVE NONDESTRUCTIVE EVALUATION : VOLUME 19. AIP CONFERENCE PROCEEDINGS, vol. 509, 2000, pages 741 - 748, XP009121299, DOI: doi:10.1063/1.1306121
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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2182350 A2 20100505**; **EP 2182350 A3 20130320**; **EP 2182350 B1 20170125**; EP 2642283 A2 20130925; EP 2642283 A3 20160817; EP 2642283 B1 20190220; JP 2010107285 A 20100513; JP 5090315 B2 20121205; US 2010106432 A1 20100429; US 8290720 B2 20121016

DOCDB simple family (application)

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